

Remarks

Claims 1, 4-14, and 16-22 were previously pending in the subject application. By this Amendment, claims 1 and 14 have been amended and new claim 23 has been added. No new matter has been introduced. Support for the amendments and new claim can be found throughout the original specification (see, for example; page 2, lines 15-16). Accordingly, claims 1, 4-14, and 16-23 are before the Examiner for further consideration.

The amendments set forth herein should not be interpreted to indicate that the applicants have agreed with, or acquiesced to, the rejections set forth in the outstanding Office Action. The amendments to the claims have been made in an effort to lend greater clarity to the claimed subject matter and to expedite prosecution. Favorable consideration of the claims now presented, in view of the remarks and amendment set forth herein, is earnestly solicited.

Claims 1, 4-14, and 16-22 have been rejected under 35 U.S.C. §102(b) as being anticipated by Chiba *et al.* (U.S. Patent Application Publication No. 2002/0134426; hereinafter referred to as “Chiba”) as evidenced by Cadena *et al.* (U.S. Patent Application Publication No. 2004/0010074; hereinafter referred to as “Cadena”) and Sigma-Aldrich (web site printouts). The applicants respectfully request reconsideration.

Though the applicants do not necessarily agree that Chiba anticipates the claims as previously presented, in an effort to expedite prosecution, independent claims 1 and 14 have each been amended to recite that “the strongly ionic group is a sulphonic acid group or a phosphoric or phosphonic acid group.” Chiba fails to disclose a membrane of a membrane electrode assembly including such a group. The Action asserts that Chiba’s membrane comprises a strongly ionic OH group, referring to the Sigma-Aldrich printouts for support. Though the applicants do not dispute that Chiba discloses OH groups, there is no teaching in Chiba of ionic OH groups, let alone strongly ionic OH groups. Any charge in Chiba is provided by other species. In any event, Chiba plainly fails to disclose a strongly ionic group which is a sulphonic acid group or a phosphoric or phosphonic acid group.

As the Examiner is aware, it is a basic premise of patent law that in order to anticipate, a single reference must disclose within the four corners of the document each and every element and limitation contained in the rejected claim. *Scripps Clinic & Research Foundation v. Genentech Inc.*,

18 U.S.P.Q.2d 1001, 1010 (Fed. Cir. 1991). As discussed above, Chiba does not teach a membrane including a strongly ionic group which is a sulphonic acid group or a phosphoric or phosphonic acid group. In addition, though it is not necessary to overcome the rejection under 35 U.S.C. §102, the applicants submit that a person of ordinary skill in the art would not have had a reason to modify Chiba to arrive at the claimed invention.

Accordingly, the applicants respectfully request reconsideration and withdrawal of the rejection under 35 U.S.C. §102.

New claim 23

New claim 23 is drawn to a photovoltaic cell comprising a membrane electrode assembly capable of transmitting light, wherein the membrane electrode assembly comprises a membrane, wherein the membrane is a material comprising a hydrophilic polymer, and wherein the hydrophilic polymer comprises an alkali OH group. Chiba fails to teach, or even suggest, such a photovoltaic cell. Though Chiba discloses OH groups, they are CH₂OH-type groups, and there is no disclosure of an alkali OH group as required by claim 23. Accordingly, the applicants respectfully submit that new claim 23 is allowable over the prior art.

In view of the foregoing remarks and amendment, the applicants believe that the currently pending claims are in condition for allowance, and such action is respectfully requested.

The Commissioner is hereby authorized to charge any fees under 37 CFR §§1.16 or 1.17 as required by this paper to Deposit Account No. 19-0065.

The applicants also invite the Examiner to call the undersigned if clarification is needed on any of this response, or if the Examiner believes a telephone interview would expedite the prosecution of the subject application to completion.

Respectfully submitted,



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LCF/ers

Attachment: Request for Continued Examination